



PubMed

Nucleotide

Protein

Genome

Structure

PopSet

Taxonomy

OMIM

Boo

Search  for   

Limits

Preview/Index

History

Clipboard

Details

     
☐ 1: A46368. erythrocyte membr...[gi:423065]

BLink, Domains, Links

LOCUS A46368 417 aa linear PRI 15-JUN-2001  
 DEFINITION erythrocyte membrane protein RhD - human.  
 ACCESSION A46368  
 VERSION A46368 GI:423065  
 DBSOURCE pir: locus A46368;

summary: #length 417 #molecular-weight 45162 #checksum 7429  
 ;  
 genetic: #gene GDB:RHD; RH; RhD ##cross-references GDB:119551;  
 OMIM:111680 #map\_position 1p36.2-1p34  
 ;  
 superfamily: human erythrocyte membrane protein RhD  
 ;  
 PIR dates: 21-Sep-1993 #sequence\_revision 18-Nov-1994 #text\_change  
 15-Jun-2001

KEYWORDS erythrocyte; surface antigen; transmembrane protein.  
 SOURCE Homo sapiens (human)  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1 (residues 1 to 417)  
 AUTHORS Saboori,A.M., Smith,B.L. and Agre,P.  
 TITLE Polymorphism in the Mr 32,000 Rh protein purified from  
 Rh(D)-positive and -negative erythrocytes  
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 85 (11), 4042-4045 (1988)  
 MEDLINE 88234555  
 REFERENCE 2 (residues 1 to 417)  
 AUTHORS Bloy,C., Blanchard,D., Dahr,W., Beyreuther,K., Salmon,C. and  
 Cartron,J.P.  
 TITLE Determination of the N-terminal sequence of human red cell Rh(D)  
 polypeptide and demonstration that the Rh(D), (c), and (E) antigens  
 are carried by distinct polypeptide chains  
 JOURNAL Blood 72 (2), 661-666 (1988)  
 MEDLINE 88294325  
 REFERENCE 3 (residues 1 to 417)  
 AUTHORS Avent,N.D., Ridgwell,K., Mawby,W.J., Tanner,M.J., Anstee,D.J. and  
 Kumpel,B.  
 TITLE Protein-sequence studies on Rh-related polypeptides suggest the  
 presence of at least two groups of proteins which associate in the  
 human red-cell membrane  
 JOURNAL Biochem. J. 256 (3), 1043-1046 (1988)  
 MEDLINE 89134163  
 REFERENCE 4 (residues 1 to 417)  
 AUTHORS Suyama,K., Goldstein,J., Aebersold,R. and Kent,S.  
 TITLE Regarding the size of Rh proteins  
 JOURNAL Blood 77 (2), 411 (1991)

**EXHIBIT 1**

MEDLINE 91091537  
 REFERENCE 5 (residues 1 to 417)  
 AUTHORS Le Van Kim,C., Cherif-Zahar,B., Raynal,V., Mouro,I., Lopez,M., Cartron,J.P. and Colin,Y.  
 TITLE Multiple Rh messenger RNA isoforms are produced by alternative splicing  
 JOURNAL Blood 80 (4), 1074-1078 (1992)  
 MEDLINE 92360855  
 REFERENCE 6 (residues 1 to 417)  
 AUTHORS Le van Kim,C., Mouro,I., Cherif-Zahar,B., Raynal,V., Cherrier,C., Cartron,J.P. and Colin,Y.  
 TITLE Molecular cloning and primary structure of the human blood group RhD polypeptide  
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (22), 10925-10929 (1992)  
 MEDLINE 93066356  
 REFERENCE 7 (residues 1 to 417)  
 AUTHORS Arce,M.A., Thompson,E.S., Wagner,S., Coyne,K.E., Ferdman,B.A. and Lublin,D.M.  
 TITLE Molecular cloning of RhD cDNA derived from a gene present in RhD-positive, but not RhD-negative individuals  
 JOURNAL Blood 82 (2), 651-655 (1993)  
 MEDLINE 93320449  
 REFERENCE 8 (residues 1 to 417)  
 AUTHORS Westhoff,C.M. and Wylie,D.E.  
 TITLE Identification of a new RhD-specific mRNA from K562 cells  
 JOURNAL Blood 83 (10), 3098-3100 (1994)  
 MEDLINE 94235883  
 REFERENCE 9 (residues 1 to 417)  
 AUTHORS Suyama,K., Lunn,R., Haller,S. and Goldstein,J.  
 TITLE Rh(D) antigen expression and isolation of a new Rh(D) cDNA isoform in human erythroleukemic K562 cells  
 JOURNAL Blood 84 (6), 1975-1981 (1994)  
 MEDLINE 94362249

FEATURES Location/Qualifiers  
 source 1..417  
 /organism="Homo sapiens"  
 /db\_xref="taxon:9606"  
 Protein 1..417  
 /product="erythrocyte membrane protein RhD"  
 /note="blood group antigen Rh(D)"

## ORIGIN

```

1 msskyprsvr rclplwaltl eaalillfyf fthydasled qkglvasyqv gqdltvmaai
61 glgfltssfr rhswssvafn lfmlalgvqw ailldgflsq fpsgkvvitl fsirlatmsa
121 lsvlisvdav lgkvnlaqlv vmvlvevtal gnlrnvisni fntdyhmmmm hiyvfaayfg
181 lsvawclpkp lpegtdkdq tatipslsam lgalfwifw psfnsallrs pierknafn
241 tyyavavsvv taisgsslah pggkisktyv hsavlaggva vgtschlips pwlamvlgv
301 aglisvggak ylpgccnrvl giphssimgy nfsllglle iiyivllvld tvgagngmig
361 fqvllsigel slaivialts glltgl11nl kiwkapheak yfddqvfwkf phlavgf

```

//

Revised: July 5, 2002.

Disclaimer | Write to the Help Desk  
 NCBI | NLM | NIH

EXHIBIT 1